

```

chain nodes :
  10 11 13 14 15 30
ring nodes :
  1 2 3 4 5 6 7 8 9 16 17 18 19 20 21 22 23 24 25
chain bonds :
  10-11 10-13 13-14 14-15 15-30
ring bonds :
  1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 16-17 16-20 17-18 18-19 19-20 21-22
  21-25 22-23 23-24 24-25
exact/norm bonds :
  10-11 10-13 13-14 14-15 15-30
exact bonds :
  2-7 3-9 7-8 8-9 16-17 16-20 17-18 18-19 19-20 21-22 21-25 22-23 23-24 24-25
normalized bonds :
  1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
  containing 1 : 16 : 21 :
  
```

G1:[\*1],[\*2]

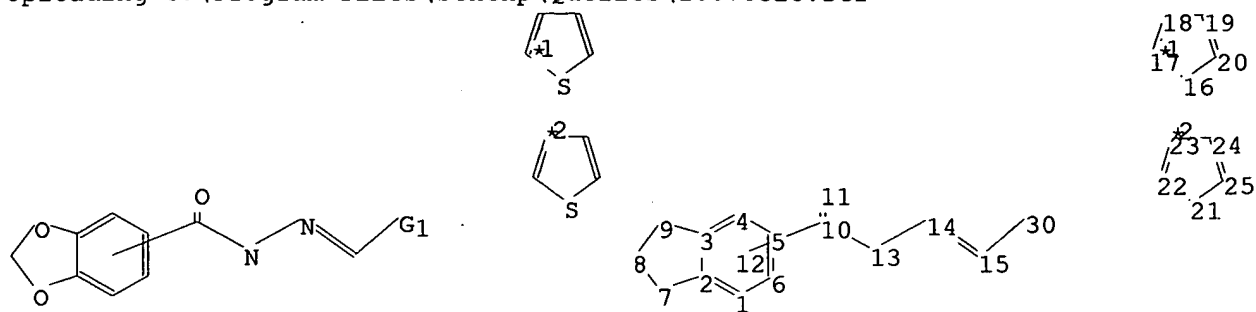
Match level :

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1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom
21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 30:CLASS
  
```

=&gt;

Uploading C:\Program Files\Stnexp\Queries\10070328.str



chain nodes :

10 11 13 14 15 30

ring nodes :

1 2 3 4 5 6 7 8 9 16 17 18 19 20 21 22 23 24 25

chain bonds :

10-11 10-13 13-14 14-15 15-30

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 16-17 16-20 17-18 18-19 19-20  
21-22 21-25 22-23 23-24 24-25

exact/norm bonds :

10-11 10-13 13-14 14-15 15-30

exact bonds :

2-7 3-9 7-8 8-9 16-17 16-20 17-18 18-19 19-20 21-22 21-25 22-23 23-24  
24-25

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 16 : 21 :

G1:[\*1],[\*2]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom  
19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 30:CLASS

L1 STRUCTURE UPLOADED

=> d l1  
 L1 HAS NO ANSWERS  
 L1 STR  
 \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam  
 SAMPLE SEARCH INITIATED 13:38:09 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS 1 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 7 TO 298  
 PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> => s l1 sss ful  
 FULL SEARCH INITIATED 13:38:38 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 177 TO ITERATE

100.0% PROCESSED 177 ITERATIONS 32 ANSWERS  
 SEARCH TIME: 00.00.01

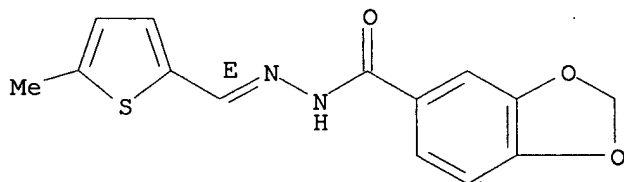
L3 32 SEA SSS FUL L1

=> => s l3  
 L4 7 L3

=> d l4 1-7 bib,ab,hitstr

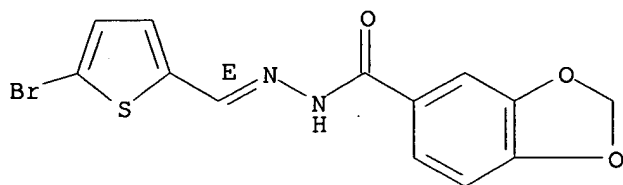
L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2005:354173 CAPLUS  
 DN 143:19261  
 TI Synthesis and vasodilatory activity of new N-acylhydrazone derivatives, designed as LASSBio-294 analogues  
 AU Silva, Alexandre G.; Zapata-Sudo, Gisele; Kummerle, Arthur E.; Fraga, Carlos A. M.; Barreiro, Eliezer J.; Sudo, Roberto T.  
 CS Departamento de Farmacologia Basica e Clinica, Instituto de Ciencias Biomedicas, Universidade Federal do Rio de Janeiro, RJ 21941-590, Brazil  
 SO Bioorganic & Medicinal Chemistry (2005), 13(10), 3431-3437  
 CODEN: BMECEP; ISSN: 0968-0896  
 PB Elsevier Ltd.  
 DT Journal  
 LA English  
 AB Conventional therapy to treat hypertension often involves arterial vasodilation. Decrease of blood pressure by vasodilators is normally associated with adverse effects because of their low vascular selectivity. This is of interest to develop new mols. with potential for clin. use and fewer side effects. Recently, a new bioactive compound of the N-acylhydrazone class, LASSBio-294, was shown to produce a cardioinotropic effect and vasodilation. In this report, new derivs. of LASSBio-294 were designed and tested on the contractile response of vascular smooth muscle from Wistar rats. Phenylephrine-induced contracture in the aorta was inhibited by the derivs. LASSBio-785 and LASSBio-788. The concns. necessary to cause 50% reduction of the maximal vascular response (IC50) were 10.2±0.5 and 67.9±6.5 µM. Vasodilation induced by both derivs. is likely to be mediated by a direct effect on smooth muscle because it was not dependent on the integrity of vascular endothelium. LASSBio-785 was seven times more potent than the reference compound LASSBio-294 (IC50 = 74 µM) in producing an endothelium-independent vasodilator effect.  
 IT **852936-62-0P**, LASSBio 787 **852936-63-1P**, LASSBio 789  
**852936-64-2P**, LASSBio 790 **852936-66-4P**, LASSBio 785  
**852936-67-5P**, LASSBio 788 **852936-68-6P**, LASSBio 786  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (synthesis and vasodilatory activity of new N-acylhydrazone derivs., designed as LASSBio-294 analogs)  
 RN 852936-62-0 CAPLUS  
 CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-[(5-methyl-2-thienyl)methylene]hydrazide (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 852936-63-1 CAPLUS  
 CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-[(5-bromo-2-thienyl)methylene]hydrazide (9CI) (CA INDEX NAME)

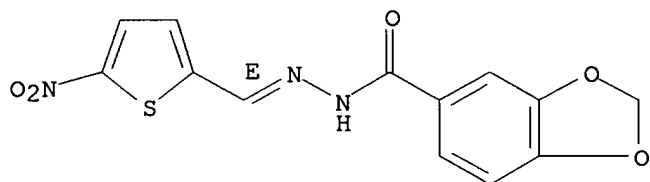
Double bond geometry as shown.



RN 852936-64-2 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-[(5-nitro-2-thienyl)methylene]hydrazide (9CI) (CA INDEX NAME)

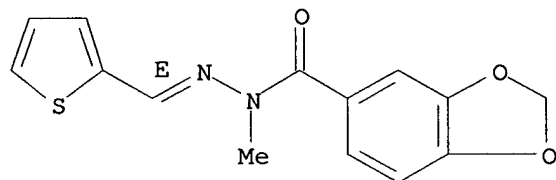
Double bond geometry as shown.



RN 852936-66-4 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-methyl(2-thienylmethylene)hydrazide (9CI) (CA INDEX NAME)

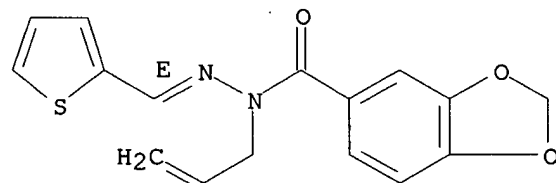
Double bond geometry as shown.



RN 852936-67-5 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-2-propenyl(2-thienylmethylene)hydrazide (9CI) (CA INDEX NAME)

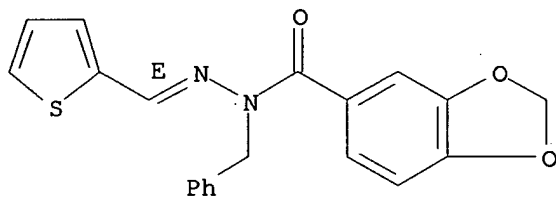
Double bond geometry as shown.



RN 852936-68-6 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2E)-(phenylmethyl)(2-thienylmethylene)hydrazide (9CI) (CA INDEX NAME)

Double bond geometry as shown.



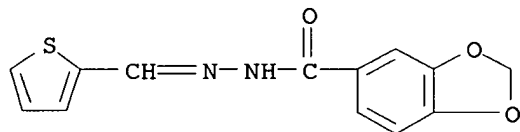
IT 314021-07-3P, LASSBio-294

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and vasodilatory activity of new N-acylhydrazone derivs., designed as LASSBio-294 analogs)

RN 314021-07-3 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
(CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:426200 CAPLUS

DN 139:255055

TI Thienylhydrazone derivative increases sarcoplasmic reticulum Ca<sup>2+</sup> release in mammalian skeletal muscle

AU Zapata-Sudo, Gisele; Sudo, Roberto T.; Maronas, Patricia A.; Silva, Gisele L. M.; Moreira, Orlando R.; Aguiar, Marli I. S.; Barreiro, Eliezer J.

CS Centro de Ciencias da Saude, Instituto de Ciencias Biomedicas, Departamento de Farmacologia Basica e Clinica, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 21941-590, Brazil

SO European Journal of Pharmacology (2003), 470(1-2), 79-85

CODEN: EJPHAZ; ISSN: 0014-2999

PB Elsevier Science B.V.

DT Journal

LA English

AB 3,4-Methylenedioxybenzoyl-2-thienylhydrazone (L-294) is a cardiac inotropic drug whose action is mediated by an increase in intracellular Ca<sup>2+</sup> concentration as a result of enhanced Ca<sup>2+</sup> accumulation in the sarcoplasmic

reticulum. In the present study we tested whether this new thienylhydrazone derivative was effective in mammalian skeletal muscle. We investigated the effect of L-294 on the contractility of isolated skeletal muscle, on Ca<sup>2+</sup> uptake and release by sarcoplasmic reticulum in skinned fibers and in membrane vesicles. L-294 increased in a dose-dependent manner tension of isolated rat soleus muscle. In skinned type I fibers, L-294 induced tension and did not alter sarcoplasmic reticulum loading with Ca<sup>2+</sup>. L-294 reduced the threshold Ca<sup>2+</sup> to induce Ca<sup>2+</sup> release and did not affect the ATP-dependent accumulation of Ca<sup>2+</sup> by sarcoplasmic reticulum vesicles. These results suggest that L-294 is an inotropic agent in skeletal muscle through an increase in the amount of Ca<sup>2+</sup> released from the sarcoplasmic reticulum.

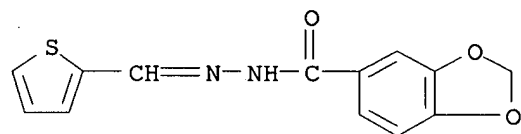
IT 314021-07-3, L 294

RL: PAC (Pharmacological activity); BIOL (Biological study)

(L-294 increases sarcoplasmic reticulum calcium release in mammalian skeletal muscle)

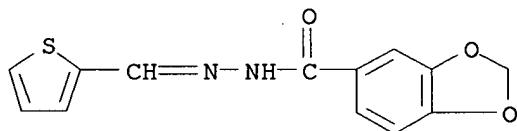
RN 314021-07-3 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
(CA INDEX NAME)



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:16510 CAPLUS  
 DN 139:78389  
 TI Strategy of molecular simplification in rational drug design: the discovery of a new cardioactive agent  
 AU Barreiro, Fliezer J.  
 CS Departamento de Farmacos, Faculdade de Farmacia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 21944-190, Brazil  
 SO Quimica Nova (2002), 25(6B), 1172-1180  
 CODEN: QUNODK; ISSN: 0100-4042  
 PB Sociedade Brasileira de Quimica  
 DT Journal  
 LA Portuguese  
 AB In this article are described examples of the successful use of mol. simplification strategy in the discovery of new drugs from bioactive natural products and synthetic compds. The discovery of a new cardiotonic derivative (37, 2-thienylidene-3,4-methylenedioxybenzoylhydrazine; LASSBio-294), efficiently synthesized from Brazilian natural product and structurally designed by mol. simplification of active pyridazinone compds. reported in the literature, was described. A brief description of the pharmacol. profile of this new cardiotonic lead-compound, belonging to the N-acylhydrazone (NAH) class, is also reported herein.  
 IT **314021-07-3**, LASSBio-294  
 RL: PAC (Pharmacological activity); BIOL (Biological study)  
 (strategy of mol. simplification in rational drug design applied to discovery of new cardioactive agent)  
 RN 314021-07-3 CAPLUS  
 CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
 (CA INDEX NAME)



RE.CNT 107 THERE ARE 107 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT



L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:88358 CAPLUS

DN 136:350361

TI Cyclic GMP-dependent vasodilatory properties of LASSBio 294 in rat aorta

AU Silva, C. L. M.; Noel, F.; Barreiro, E. J.

CS Departamento de Farmacologia Basica e Clinica, Instituto de Ciencias Biomedicas, Faculdade de Farmacia, Federal University of Rio de Janeiro, Rio de Janeiro, 21941-590, Brazil

SO British Journal of Pharmacology (2002), 135(1), 293-298

CODEN: BJPCBM; ISSN: 0007-1188

PB Nature Publishing Group

DT Journal

LA English

AB The effects of LASSBio 294, a new 3,4-methylenedioxybenzoyl-2-thienylhydrazone, on vascular tonus were investigated in isolated rat aortic rings. LASSBio 294 induced a concentration-dependent relaxation of intact

rat aortic rings with an inhibitory concentration (IC<sub>50</sub>) of 74  $\mu$ M (95% confidence limits: 59-92). The mech. removal of the endothelium abolished this effect. In aortic rings with intact endothelium the effect of 100  $\mu$ M LASSBio 294 was not altered by the pharmacol. inhibition of NOS and cyclo-oxygenase pathways with 500  $\mu$ M L-NAME and 10  $\mu$ M indomethacin, resp. LASSBio 294 (100  $\mu$ M) was able to relax aortic rings pre-contracted with high extracellular K<sup>+</sup> (KCl 100 mM). The relaxant effect of LASSBio 294 was fully reversed (and prevented) by the addition of 1  $\mu$ M ODQ (1H-(1,2,4)oxadiazolo[4,3-a]quinoxaline-1-one), a selective inhibitor of soluble guanylate cyclase. LASSBio 294 (100  $\mu$ M) had no direct effect on PDE3 and PDE4 activities, however, it increased by 150% cyclic GMP content in aortic rings pre-treated with 100  $\mu$ M L-NAME and 10  $\mu$ M indomethacin, as did 1  $\mu$ M zaprinast, a selective PDE5 inhibitor. In conclusion, LASSBio 294 induced relaxation of isolated rat aorta probably by directly increasing cyclic GMP content, possibly as a consequence of PDE5 inhibition.

IT 314021-07-3, LASSBio 294

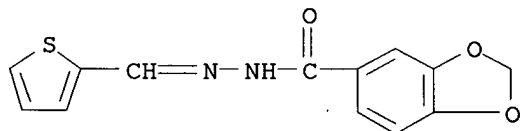
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(LASSBio 294; cGMP-dependent vasodilatory properties of LASSBio 294 in rat aorta)

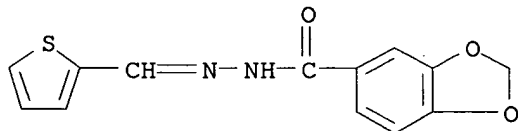
RN 314021-07-3 CAPLUS

CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
(CA INDEX NAME)



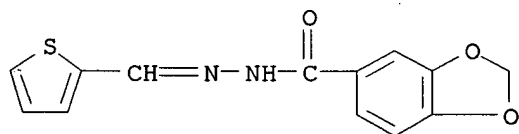
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:789944 CAPLUS  
 DN 136:145060  
 TI A novel thienylhydrazone, (2-thienylidene)3,4-methylenedioxybenzoylhydrazine, increases inotropism and decreases fatigue of skeletal muscle  
 AU Gonzalez-Serratos, Hugo; Chang, Ruzhang; Pereira, Edna F. R.; Castro, Newton G.; Aracava, Yasco; Melo, Paulo A.; Lima, Patricia C.; Fraga, Carlos A. M.; Barreiro, Eliezer J.; Albuquerque, Edson X.  
 CS Department of Physiology, University of Maryland School of Medicine, Baltimore, MD, USA  
 SO Journal of Pharmacology and Experimental Therapeutics (2001), 299(2), 558-566  
 CODEN: JPETAB; ISSN: 0022-3565  
 PB American Society for Pharmacology and Experimental Therapeutics  
 DT Journal  
 LA English  
 AB This study was designed to investigate the effects on single skeletal muscle fibers of a novel thienylhydrazone, referred to as LASSBio-294, which is a bioisoster of pyridazinone compds. that inhibit the cAMP-specific phosphodiesterase (PDE) 4. Twitch and fatigue were analyzed in single skeletal muscle fibers isolated from either the semitendinous or the tibialis anterior muscles dissected from the frog *Rana pipiens*. LASSBio-294 (12.5-100  $\mu$ M) increased twitch tension, accelerated the maximal rate of tension decay during relaxation, and had very little effect in the maximal rate of tension development of muscle fibers directly stimulated at  $\leq 30$  Hz. The pos. inotropic effect of LASSBio-294 developed slowly, reaching its maximum at 40 min and was inversely proportional to the frequency of stimulation, becoming negligible at 60 and 90 Hz. The concentration-response relationship for LASSBio-294-induced potentiation of twitch tension was bell-shaped, with maximal effect occurring at 25  $\mu$ M. In addition, LASSBio-294 reduced development of fatigue induced by tetanic stimulation of the muscle fibers and reduced the time needed for 80% prefatigue tension recovery after fatigue had developed to 50% of the maximal pretetanic force. These effects of LASSBio-294 can be fully explained by stimulation of the sarcoplasmic reticulum  $Ca^{2+}$  pump and could be ascribed to an increase in cellular levels of cAMP due to PDE inhibition. The novel thienylhydrazone LASSBio-294 may be useful for treatment of patients suffering from conditions in which muscle fatigue is a debilitating symptom (e.g., chronic heart failure).  
 IT **314021-07-3**  
 RL: PAC (Pharmacological activity); BIOL (Biological study)  
 ((2-thienylidene)3,4-methylenedioxybenzoylhydrazine increases inotropism and decreases fatigue of skeletal muscle)  
 RN 314021-07-3 CAPLUS  
 CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
 (CA INDEX NAME)



RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:789785 CAPLUS  
 DN 136:112433  
 TI The new compound, LASSBio 294, increases the contractility of intact and saponin-skinned cardiac muscle from wistar rats  
 AU Sudo, R. T.; Zapata-Sudo, G.; Barreiro, E. J.  
 CS Departamento de Farmacologia Basica e Clinica, Instituto de Ciencias Biomedicas, Centro de Ciencias da Saude, Rio de Janeiro, 21941-590, Brazil  
 SO British Journal of Pharmacology (2001), 134(3), 603-613  
 CODEN: BJPCBM; ISSN: 0007-1188  
 PB Nature Publishing Group  
 DT Journal  
 LA English  
 AB 1 A new compound designated as LASSBio 294 (L-294), 3,4-methylenedioxybenzoyl-2-thienylhydrazone, was synthesized as an alternative therapeutic for cardiac dysfunction. 2 L-294 increased in a dose-dependent manner the spontaneous contractions of isolated hearts from Wistar rats with maximal effect ( $128.0 \pm 0.7\%$  of control) observed at  $25 \mu\text{M}$ . 3 The pos. inotropic effect of L-294 was also observed in elec. stimulated cardiac tissues from Wistar rats. The maximal increment of twitches, at  $200 \mu\text{M}$ , was  $163.1 \pm 18.4\%$  for atrial,  $153.5 \pm 28.5\%$  for papillary and  $201.5 \pm 18.5\%$  for ventricular muscles. 4 In saponin skinned ventricular cells: (a) L-294 present in the period of sarcoplasmic reticulum (SR) loading with  $\text{Ca}^{2+}$  shifted the dose and caffeine-induced contracture curve; (b) L-294 ( $100 \mu\text{M}$ ) increased 40% the  $\text{Ca}^{2+}$  uptake into SR; (c) L-294 did not significantly alter the sensitivity of contractile proteins to  $\text{Ca}^{2+}$  in SR-disrupted skinned ventricular cells. 5 Retrograde perfusion of the isolated heart from Wistar rats with L-294 ( $100 \mu\text{M}$ ) did not cause any significant change in rhythm, heart rate (control,  $220 \pm 14.7$  b.p.m.;  $246 \pm 24.6$  b.p.m. for L-294), PR interval (control,  $66.0 \pm 2.4$  ms;  $64.0 \pm 2.3$  ms for L-294) or QRS duration (control,  $28.8 \pm 3.4$  ms;  $32.0 \pm 2.0$  ms for L-294). 6 These results suggest a novel mechanism for a pos. cardioinotropic effect through an interaction with the  $\text{Ca}^{2+}$  uptake/release process of the SR. The effect of L-294 could be explained by a pronounced increased accumulation of  $\text{Ca}^{2+}$  into the SR.  
 IT 314021-07-3, LASSBio 294  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (the new compound, LASSBio 294, increases the contractility of intact and saponin-skinned cardiac muscle from wistar rats)  
 RN 314021-07-3 CAPLUS  
 CN 1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI)  
 (CA INDEX NAME)

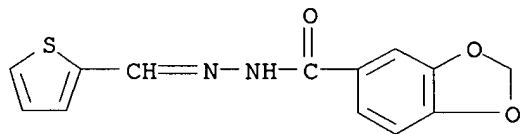


RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2000:911249 CAPLUS  
 DN 134:56560  
 TI Preparation of thienylhydrazone with digitalis-like properties (positive inotropic effects)  
 IN Albuquerque, Edson X.; De Barreiro, Eliezer J.  
 PA University of Maryland, Baltimore, USA; Sudo, Roberto Takashi  
 SO PCT Int. Appl., 79 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

*App<sup>c</sup> PCT*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000078754	A1	20001228	WO 2000-US17024	20000621
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2384525	AA	20001228	CA 2000-2384525	20000621
	EP 1532140	A1	20050525	EP 2000-941596	20000621
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, FI, CY			
PRAI	US 1999-140352P	P	19990621		
	WO 2000-US17024	W	20000621		
OS	MARPAT 134:56560				
AB	The title compds. I [R1 = H, alkyl, (un)substituted Ph, R2 = H, alkenyl, (un)substituted phenyl], having digitalis-like properties, were prepared Thus, 3,4-methylenedioxybenzoyl-2-thienylhydrazone (LASSBio-294) was prepared. LASSBio-294 produces pos. inotropic effect on cardiac and skeletal muscle. The invention is useful for the treatment of congestive heart failure and muscle fatigue. It lacks toxic effects seen in digitalis glycosides.				
IT	<b>314021-07-3P</b> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of thienylhydrazone with digitalis-like properties)				
RN	314021-07-3 CAPLUS				
CN	1,3-Benzodioxole-5-carboxylic acid, (2-thienylmethylene)hydrazide (9CI) (CA INDEX NAME)				



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 13:37:00 ON 04 OCT 2005)

FILE 'REGISTRY' ENTERED AT 13:37:05 ON 04 OCT 2005

L1 STRUCTURE UPLOADED

L2 1 S L1 SSS SAM

L3 32 S L1 SSS FUL

FILE 'CAPLUS' ENTERED AT 13:38:45 ON 04 OCT 2005

L4 7 S L3

FILE 'CAOLD' ENTERED AT 13:39:14 ON 04 OCT 2005

=&gt; s 13

L5 0 L3

=&gt; log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.43

197.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-5.11

STN INTERNATIONAL LOGOFF AT 13:39:25 ON 04 OCT 2005